

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). A method for signaling a bearer connection coupled to a telecommunications network, wherein the telecommunications network employs a first protocol and the bearer connection employs a second protocol, the method comprising the steps of:

mapping at least a portion of the first protocol to the second protocol by mapping session description protocol parameters to control Voice over ATM connections including an ATM addressing scheme having an E.164 address, Routing domain, and Area fields; and

inserting a first signal of the first protocol into a second signal of the second protocol according to the mapping, wherein the inserted first signal is employed in the control of the bearer connection;

~~, wherein a portion of the second protocol is redefined as a private field to receive the inserted first signal~~

the step of mapping redefining the E.164 address, the Routing Domain, and the Area fields, as an overlay area, into a private IP/ATM address fitting bit-wise within previously defined fields, thereby abiding by addressing rules of the ATM addressing scheme.

Claim 2 (currently amended). The method according to claim 1, wherein ~~the first protocol is an Internet Protocol (IP), and the step of mapping maps at least a portion of the Internet Protocol to the second protocol~~ the step of mapping maps a first portion of the overlay area with dummy data to isolate the overlay area from the ATM addressing scheme and maps a next portion of the overlay area to an end-point IP address.

Claim 3 (original). The method according to claim 1, wherein the second protocol is an asynchronous transfer mode (ATM) protocol and the step of mapping maps at least a portion of the ATM protocol to the first protocol.

Claim 4 (original). The method according to claim 1, wherein the first protocol is an Internet Protocol (IP) and the second protocol is an asynchronous transfer mode (ATM) protocol, wherein the step of mapping maps at least a portion of the Internet Protocol to the ATM protocol.

Claim 5 (original). The method according to claim 1, further comprising the step of translating the first signal of the first protocol into a signal suitable for

insertion into the second signal of the second protocol according to the mapping.

Claim 6 (original). The method according to claim 5, wherein the first protocol is an Internet Protocol (IP), wherein the step of translating translates an Internet Protocol address into a signal that is insertable into a predetermined area of the second signal of the second protocol.

Claim 7 (original). The method according to claim 6, wherein the second signal of the second protocol is an ATM address and the step of translating translates the Internet Protocol address into a signal suitable for insertion into an area within a network prefix of the ATM address.

Claim 8 (original). The method according to claim 7, wherein the step of mapping redefines a portion of the network prefix field following an authority and format Identifier.

Claim 9 (original). The method according to claim 1, wherein the first signal of the first protocol is Internet Protocol (IP) port information, wherein the step of translating translates the Internet Protocol port information into a signal that is insertable into a predetermined area of the second signal of the second protocol.

Claim 10 (original). The method according to claim 9, wherein the second signal of the second protocol is a generic identifier transport (GIT) information element, and wherein the step of translating translates the first signal into a signal suitable for insertion into the GIT information element.

Claim 11 (original). The method according to claim 10, wherein the step of mapping maps the first signal translated into a user data area of the GIT information element.

Claim 12 (currently amended). An apparatus for signaling a bearer connection coupled to a telecommunications network, wherein the telecommunications network employs a first protocol and the bearer connection employs a second protocol, the apparatus comprising:

a translator that translates, according to a predetermined mapping, between a first signal of the first protocol and a second signal of the second protocol; and

a gateway that inserts the first signal translated by the translator into the second signal, wherein the inserted first signal is employed in the control of the bearer connection, ~~and wherein a portion of the second protocol is redefined as a private field to receive the inserted first signal;~~

the predetermined mapping:

serving to map at least a portion of the first protocol to the second protocol by mapping session description protocol parameters to control Voice over ATM connections including an ATM addressing scheme having an E.164 address, Routing domain, and Area fields, and

redefining the E.164 address, the Routing Domain, and the Area fields, as an overlay area, into a private IP/ATM address fitting bit-wise within previously defined fields, thereby abiding by addressing rules of the ATM addressing scheme.

Claims 13-15 (cancelled).

Claim 16 (original). The apparatus according to claim 12, further comprising a map that maps at least a portion of the first protocol to the second protocol.

Claim 17 (original). The apparatus according to claim 16, wherein the map maps the portion of the first protocol to an area suitable for insertion into the second signal of the second protocol.

Claim 18 (original). The apparatus according to claim 12; further comprising a switch.

Claim 19 (original). The apparatus according to claim 12, further comprising an ingress media gateway for receiving the first signal translated and inserted into the second signal for setting up an initiating call.

Claim 20 (original). The apparatus according to claim 12, further comprising an egress media gateway for receiving the first signal translated and inserted into the second signal for setting up a terminating call.

Claim 21 (currently amended). A method for signaling a bearer connection coupled to a telecommunications network, wherein the telecommunications network employs a first protocol and the bearer connection employs a second protocol, the method comprising the steps of:

mapping a control signal of the first protocol formatted according to the first protocol to the second protocol by mapping session description protocol parameters to control Voice over ATM connections including an ATM addressing scheme having an E.164 address, Routing domain, and Area fields, wherein a format for control signals of the first protocol differs from a format for control signals of the second protocol, at least in part, the step of mapping redefining the E.164 address, the Routing Domain, and the Area fields, as an overlay area, into a private IP/ATM address fitting bit-wise within previously defined fields, thereby abiding by addressing rules of the ATM addressing scheme; and

inserting the control signal from the first protocol into a private ~~filed~~ field of the second protocol according to the mapping so that the mapped control signal is inserted according to the format for control signals of the second protocol; and

extracting from the second protocol, the inserted control signal wherein the extracted control signal dynamically controls, at least in part, establishment of the bearer connection.

Claim 22 (previously presented). The method of claim 21, wherein the step for mapping includes basing the mapping on a virtual addressing overlay that includes a private addressing scheme overlayed over a public addressing scheme of the second protocol.

Claim 23 (currently amended). The method of claim 22, wherein the overlayed private addressing scheme provides for inserting the control signal into the second signal so that the inserted control signal is ~~operationally~~ segregated within the public addressing scheme of the second protocol.

Claim 24 (currently amended). The method of claim 22, wherein the control signal is inserted into the virtual addressing overlay when the control signal is inserted into the private field of the second protocol; and the step for extracting extracts the inserted control signal from the virtual addressing overlay.

Claim 25 (previously presented). The method of claim 21, wherein the first protocol is the Internet Protocol (IP).

Claim 26 (previously presented). The method of claim 21, wherein the first protocol is the Internet Protocol (IP) and the step for mapping includes mapping session description protocol (SDP) data into the second protocol.

Claim 27 (previously presented). The method of claim 26, wherein the SDP data is mapped based on a virtual addressing overlay, wherein the virtual addressing overlay includes a private addressing scheme overlayed over a portion of a public addressing scheme of the second protocol.

Claim 28 (previously presented). The method of claim 21, wherein the second protocol is the asynchronous transfer mode (ATM) protocol.

Claim 29 (previously presented). The method of claim 1, wherein the private field receives the inserted first signal while functionally maintaining the addressing scheme of the second protocol.